

What is claimed is:

1.

A microemulsion drug composition comprising:
microemulsion oil droplets of a drug;
said microemulsion size droplets being emulsified with an
emulsifier combination;
said emulsifier combination comprising a long chain polymer
surfactant component and a short chain fatty acid
surfactant component, the amounts of each component
being selected to provide thermodynamically stable
microemulsion droplets.

2.

The drug composition of claim 1 wherein the particle
size of the microemulsion droplets is from 10 nm to 100 nm.

3.

The drug composition of claim 2 wherein the long chain
polymer surfactant component is selected from the group
consisting of polyoxyethylene alkyl ethers, polyoxyethylene
glycols, polyvinylpyrrolidone, polyvinylalcohol, tyloxapol,
and poloxamer.

4.

The drug composition of claim 3 wherein the long chain
polymer surfactant component is a poloxamer.

5.

The drug composition of claim 2 wherein the short chain
fatty acid component is a C₈ to C₁₆ component.

6.

The drug composition of claim 5 wherein the short chain
fatty acid component is a C₈ to C₁₂ component.

7.

The drug composition of claim 1 wherein the long chain
surfactant component is a poloxamer and the fatty acid
component is a laurate.

8.

The drug composition of claim 1 wherein the normally difficultly soluble drug is an oil.

9.

The drug composition of claim 1 wherein the normally difficultly soluble drug is a solid.

10.

The drug composition of claim 1 wherein the normally difficultly soluble drug is selected from the group consisting of analgesics, anesthetics, antibiotics, antidepressants, antidiabetics, antifungals, antihypertensives, anti-inflammatories, antineoplastics, immunosuppressives, sedatives, antianginals, antipsychotics, antimanic, antiarthritics, antigouts, anticoagulants, antithrombolytics, anticonvulsants, antiparkinsons, antibacterials, antivirals, and anti-infectives.

11.

The drug composition of claim 10 wherein the drug is an anesthetic.

12.

The drug composition of claim 11 wherein the drug is an aryl.

13.

The drug composition of claim 12 wherein the drug is propofol.

14.

The drug composition of claim 2 wherein the ratio of long chain polymeric component to short chain fatty acid component is from 10 to 100 to 25 to 80 (wt/wt).

15.

The drug composition of claim 2 wherein the long chain polymeric component has a molecular weight greater than 1000, and the short chain fatty acid component has a molecular weight less than 1000.

16.

The drug composition of claim 14 wherein the amount of normally difficultly soluble drug is from 0.1% to 1.0%.

17.

The drug composition of claim 1 wherein the microemulsion is selected from the group consisting of oil-in-water, water-in-oil and interphase emulsions.

18.

The drug composition of claim 1 wherein the normally difficultly soluble drug is a mixture of the base form and the salt form of the drug.

19.

The drug composition of claim 1 wherein the drug transfer rate is controlled by control of the character and nature of micelle formation of the microemulsion.

20.

The drug composition of claim 1 wherein the interfacial tension of the drug with said mulsifier combination is less than 0.1 dines per cm and the droplet size is less than 200 nm.

21.

A method of controlling drug delivery and transfer rate of drugs comprising:

preparing microdroplets of the drug with an emulsifier combination of a long chain polymer surfactant component, and a short chain fatty acid surfactant component, the amounts of each being selected to provide thermodynamically stable microemulsion droplets and to control delivery and transfer rate as desired.

22.

The method of claim 21 wherein the drug interfacial tension with the emulsion is less than 0.1 duines per cm with a droplet size of the active drug in the carrier being less than 200 nm.